

Remarks

In the Restriction Requirement, the Patent Office has determined that the application contains the following inventions: Invention I - Claims 1-23, drawn to a power source; Invention II – Claims 24-34, drawn to control the torque electronically, Invention III – Claim 35-47, drawn to control system for electrical energy transiting signal to crank assembly, and Invention IV – Claim 57, 58¹, drawn to a first and second power source. The Examiner did not include claims 48-56 in any of the inventions. For purposes of this Response, the Applicants will assume that the Examiner meant to include Claims 48-56 as Invention V. The Applicants have elected the claims of Invention I with traverse. In particular, the Applicants submit that the Patent Office should withdraw the Restriction Requirement and examine claims 1-57 concurrently.

Argument

In the Restriction Requirement, the Patent Office provided that “Inventions I, II,II [sic] and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I and II and III have separate utility.”

Further, the Patent Office provides because “these inventions are distinct for the reasons give above and the search required for Group I,II is not required for Group III,IV restriction for examination purposes as indicated is proper.”

The applicants respectfully disagree with the restriction requirement with regard to at least some of the claims of Inventions I, II, and III. For example, Claim 1-23 of Invention I, and Claim 25 of Invention II, are all directed to a power source that includes

¹ There is no claim 58 in the present application.

a one-way drive mechanism. Further, Claims 2-8 of Invention I, Claims 24-34 of Invention II, Claim 41 and 42 of Invention III, and Claims 51 and 52 of Invention V are all directed to a power source having a control system that controls the amount of torque. Moreover, Claims 16-22 of Invention I, Claims 27-33 of Invention II, Claims 35-47 of Invention III, and Claim 50 of Invention V are all directed to a power source having a control system that causes a first signal to be transmitted to the user through the crank assembly.

Accordingly, because at least some of the claims of each Invention do not have a separate utility, the restriction requirement is improper and all of the claims should be examined concurrently.

Additionally, the Patent Office fails to provide any reasons or examples to support either of the requirements of MPEP §806.05(d). The Examiner must provide reasons and/or examples to support conclusions regarding the restriction requirement. MPEP § 803. Accordingly, in view of the lack of support, the Restriction Requirement is improper, and all of the claims should be examined concurrently with the claims of Invention I.

AMENDMENT

Please amend the application as set forth below:

Current Status of All Claims in the Application:

1. (Amended) A power source for use by a user, the power source comprising:

a housing;

a stator component secured to the housing;

a rotor component that rotates relative to the stator component, the rotor component including a rotor input, wherein rotation of the rotor component relative to the stator component results in the generation of electrical energy;

a crank assembly including a first crank output that is rotated by the user and a second crank output that is rotated by the user; and

a first one-way drive mechanism that couples the [crank assembly] the first crank output to the rotor component and a second one-way mechanism that couples the second crank output to the rotor component, the first one-way drive mechanism inhibiting rotation of the first crank output relative to the rotor input when the first crank output is rotated in a first rotational direction and allows for rotation of the first crank output relative to the rotor input when the first crank output is rotated in a second rotational direction that is opposite from the first rotational direction, the second one-way drive mechanism inhibiting rotation of the second crank output relative to the rotor input when the second crank output is rotated in one rotational direction and allows for rotation of the second crank output relative to the rotor input when the second crank output is rotated in the other rotational direction that is opposite from the first rotational direction.

2. (Original) The power source of claim 1 further comprising a control system that receives the electrical energy and electronically controls the amount of torque required to rotate the rotor input by dynamically adjusting the level of at least one of an output voltage and an output current.

3. (Amended) The power source of claim 2 wherein the crank assembly includes a first pedal that is coupled to the first crank output and a second pedal that is coupled to [a] the second crank output, wherein each pedal moves between a first position and a second position, and wherein the control system electronically controls the amount of torque required to rotate each crank output by dynamically adjusting the level of at least one of an output voltage and an output current.

4. (Original) The power source of claim 3 wherein when the first pedal is in the first position the torque required to rotate the first crank output is greater than the torque required to rotate the first crank output when the first pedal is at the second position.

5. (Original) The power source of claim 4 wherein when the first pedal is at the first position the torque is at least approximately 5 percent greater than when the first pedal is at the second position.

6. (Original) The power source of claim 4 wherein when the first pedal is at the first position the torque is at least approximately 10 percent greater than when the first pedal assembly is at the second position.

7. (Original) The power source of claim 1 further comprising a control system that receives the electrical energy and electronically controls the amount of torque required to rotate the rotor input by dynamically adjusting the level of the electrical energy delivered to a load.

8. (Amended) The power source of claim 7 wherein the crank assembly includes a first pedal that is coupled to the first crank output and a second pedal that is coupled to [a] the second crank output, wherein each pedal moves between a first position and a second position, and wherein the control system electronically controls the amount of torque required to rotate each crank output by dynamically adjusting the level of the electrical energy delivered to the load.

9. (Original) The power source of claim 1 further comprising a control system that receives the electrical energy and electronically controls a rotational velocity of the rotor component.

10. (Original) The power source of claim 9 wherein the crank assembly includes a first pedal that is coupled to the first crank output, wherein the first pedal moves between a first position and a second position, and wherein the control system electronically controls the rotational velocity of the rotor component so that the rotational velocity is approximately constant during the movement of the first pedal between the first position and the second position.

11. (Original) The power source of claim 10 wherein the first position is an upper pedal position and the second position is a lower pedal position.

12. (Original) The power source of claim 11 wherein the control system electronically controls the rotation velocity of the rotor component so that the rotational velocity is approximately constant during the movement of the first pedal between the second position and the first position.

13. (Amended) The power source of claim 9 wherein the crank assembly includes a second pedal that is coupled to [a] the second crank output, wherein the second pedal moves between an upper pedal position and a lower pedal position, and wherein the control system electronically controls the rotational velocity of the rotor component so that the rotational velocity is approximately constant during the movement of the second pedal back and forth between the positions.

14. (Original) The power source of claim 1 further comprising a control system that receives the electrical energy and dynamically adjusts the level of at least one of an output voltage and an output current.

15. (Original) The power source of claim 14 wherein the control system includes an additional electrical input for receiving electrical energy from an additional power source.

16. (Original) The power source of claim 1 further comprising a control system that receives the electrical energy and causes a first signal to be transmitted to the user through the crank assembly.

17. (Original) The power source of claim 16 wherein the control system causes the crank assembly to vibrate to transfer the first signal to the user.

18. (Original) The power source of claim 17 wherein the control system causes the crank assembly to vibrate at a first pulse to transfer the first signal to the user.

19. (Original) The power source of claim 18 wherein the control system causes the crank assembly to vibrate at a second pulse to transfer a second signal to the user, the second pulse being different than the first pulse.

20. (Original) The power source of claim 16 wherein the control system causes a torque of the crank assembly to change at a first rate to transfer a first signal to the user.

21. (Original) The power source of claim 20 wherein the control system causes the torque of the crank assembly to change at a second rate to transfer a second signal to the user.

22. (Original) The power source of claim 16 wherein the crank assembly includes a first pedal and a second pedal.

23. (Original) The power source of claim 1 further comprising a control system that receives the electrical energy, the control system including an energy dissipater that selectively dissipates energy.

24. (Original) A power source that is powered by a user to charge a load, the power source comprising:

- a housing;

- a stator component secured to the housing;

- a rotor component that rotates relative to the stator component, wherein rotation of the rotor component relative to the stator component results in the generation of electrical energy;

- a crank assembly that includes a first crank output that is rotated by the user, wherein rotation of the first crank output results in rotation of the rotor component; and

a control system that receives the electrical energy and electronically controls the amount of torque required to rotate the rotor component based on at least one of (i) an angular velocity of the first crank output, (ii) an angular position of the crank assembly, (iii) a current in the load, and (iv) a current generated by rotation of the rotor component relative to the stator component.

25. (Original) The power source of claim 24 further comprising a one-way drive mechanism that couples the crank assembly to the rotor component, the one-way drive mechanism inhibiting rotation of the first crank output relative to a rotor input of the rotor component when the first crank output is rotated in a first rotational direction and allows for rotation of the first crank output relative to the rotor input when the first crank output is rotated in a second rotational direction that is opposite from the first rotational direction.

26. (Original) The power source of claim 24 wherein the control system includes an additional electrical input for receiving electrical energy from an additional power source.

27. (Original) The power source of claim 24 wherein the control system causes a first signal to be transmitted to the user through the crank assembly.

28. (Original) The power source of claim 27 wherein the control system causes the crank assembly to vibrate to transfer the first signal to the user.

29. (Original) The power source of claim 28 wherein the control system causes the crank assembly to vibrate at a first pulse to transfer the first signal to the user.

30. (Original) The power source of claim 29 wherein the control system causes the crank assembly to vibrate at a second pulse to transfer a second signal to the user, the second pulse being different than the first pulse.

31. (Original) The power source of claim 27 wherein the control system causes the torque required to rotate the rotor component to change at a first rate to transfer a first signal to the user.

32. (Original) The power source of claim 31 wherein the control system causes the torque required to rotate the rotor component to change at a second rate to transfer a second signal to the user.

33. (Original) The power source of claim 27 wherein the crank assembly includes a first pedal and a second pedal.

34. (Original) The power source of claim 24 wherein the control system including an energy dissipater that selectively dissipates energy.

35. (Original) A power source that is powered by a user to direct current to an object, the power source comprising:

- a housing;

- a stator component secured to the housing;

- a rotor component that rotates relative to the stator component;

- a crank assembly that is coupled to the rotor component, the crank assembly including a first crank output that rotates relative to the housing, wherein rotation of the first crank output by the user results in rotation of the rotor component relative to the stator component and the production of electrical energy; and

a control system that receives the electrical energy and causes a first signal to be transmitted to the user through the crank assembly.

36. (Original) The power source of claim 35 wherein the control system causes the crank assembly to vibrate to transfer the first signal to the user.

37. (Original) The power source of claim 36 wherein the control system causes the crank assembly to vibrate at a first pulse to transfer the first signal to the user.

38. (Original) The power source of claim 37 wherein the control system causes the crank assembly to vibrate at a second pulse to transfer a second signal to the user, the second pulse being different than the first pulse.

39. (Original) The power source of claim 35 wherein the control system causes a torque required to rotate the rotor component to change at a first rate to transfer a first signal to the user.

40. (Original) The power source of claim 39 wherein the control system causes the torque required to rotate the rotor component to change at a second rate to transfer a second signal to the user.

41. (Original) The power source of claim 35 wherein the control system receives the electrical energy and electronically controls the amount of torque required to rotate the rotor component by dynamically adjusting the level of at least one of an output voltage and an output current.

42. (Original) The power source of claim 41 wherein the crank assembly includes a first pedal that is coupled to the first crank output and a second pedal that is coupled to a second crank output, wherein each pedal moves between a first position and a second position, and wherein the control system electronically controls the amount of torque required to rotate each crank output by dynamically adjusting the level of at least one of an output voltage and an output current.

43. (Original) The power source of claim 35 wherein the control system electronically controls a rotational velocity of the rotor component.

44. (Original) The power source of claim 43 wherein the crank assembly includes a first pedal that is coupled to the first crank output, wherein the first pedal moves between an upper position and a lower position, and wherein the control system electronically controls the rotational velocity of the rotor component so that the rotational velocity is approximately constant during the movement of the first pedal back and forth between the upper position and the lower position.

45. (Original) The power source of claim 35 wherein the control system dynamically adjusts the level of at least one of an output voltage and an output current.

46. (Original) The power source of claim 45 wherein the control system includes an additional electrical input for receiving electrical energy from an additional power source.

47. (Original) The power source of claim 35 wherein the control system includes an energy dissipater that selectively dissipates energy.

48. (Original) A power source that is powered by a user to direct current to an object, the power source comprising:

a housing;
a stator component secured to the housing;
a rotor component that rotates relative to the stator component;
a crank assembly that is coupled to the rotor component, the crank assembly rotating relative to the housing, wherein rotation of the crank assembly by the user results in rotation of the rotor component relative to the stator component and the production of electrical energy; and
a control system that receives the electrical energy, the control system including an energy dissipater that selectively dissipates electrical energy.

49. (Original) The power source of claim 48 wherein the control system selectively dissipates electrical energy when the object is charged.

50. (Original) The power source of claim 48 wherein the control system causes a first signal to be transferred to the user through the crank assembly.

51. (Original) The power source of claim 48 wherein the control system electronically controls the amount of torque required to rotate the rotor component by dynamically adjusting the level of at least one of an output voltage and an output current.

52. (Original) The power source of claim 51 wherein the crank assembly includes a first pedal that is coupled to a first crank output and a second pedal that is coupled to a second crank output, wherein each pedal moves between a first position and a second position, and wherein the control system electronically controls the amount of torque required to rotate each crank output by dynamically adjusting the level of at least one of an output voltage and an output current.

53. (Original) The power source of claim 48 wherein the control system electronically controls a rotational velocity of the rotor component.

54. (Original) The power source of claim 53 wherein the crank assembly includes a first pedal that moves between an upper position and a lower position, and wherein the control system electronically controls the rotational velocity of the rotor component so that the rotational velocity is approximately constant during the movement of the first pedal back and forth between the upper position and the lower position.

55. (Original) The power source of claim 48 wherein the control system dynamically adjusts the level of at least one of an output voltage and an output current.

56. (Original) The power source of claim 55 wherein the control system includes an additional electrical input for receiving electrical energy from an additional power source.

57. (Original) A power source combination for use by a first user and a second user for directing current to an object, the power source combination comprising:

a first power source that is powered by the first user that is electrically connected to the object, the first power source including a housing, a stator component secured to the housing, a rotor component that rotates relative to the stator component, a crank assembly that is coupled to the rotor component, the crank assembly rotating relative to the housing, wherein rotation of the crank assembly by the first user results in rotation of the rotor component relative to the stator component and the production of electrical energy, and a control system that takes the electrical energy and electronically controls the level of first output voltage to the object; and

a second power source that is powered by the second user that is electrically connected to the object, the second power source including a housing, a stator component secured to the housing, a rotor component that rotates relative to the stator component, a crank assembly that is coupled to the rotor component, the crank assembly rotating relative to the housing, wherein rotation of the crank assembly by the second user results in rotation of the rotor component relative to the stator component and the production of electrical energy, and a control system that takes the electrical energy and electronically controls the level of second output voltage to the object so that the second output voltage approximately matches the first output voltage.

REMARKS

Claims 1-57 are pending in the above-captioned patent application after this amendment. Claims 1, 3, 8, and 13 have been amended. Support for the amendments to claims can be found throughout the originally filed specification. In particular, support for the amendment to the claims can be found in Figures 7A-7F and pages 29-31.

No new matter is believed to have been added by this amendment. Reconsideration of the pending application is respectfully requested.

CONCLUSION

In conclusion, the Applicant respectfully submit that the Restriction Requirement should be withdrawn and claims 1-57 should be examined concurrently. The Examiner is requested to call the undersigned at 858-456-1951 for any reason that would advance the instant application to issue. Any additional extension of time required for the timely submission of this paper, the fees for which have not been previously paid, is hereby petitioned and requested.

Respectfully submitted,



STEVEN G. ROEDER
Attorney for Applicants
Registration No. 37,227

The Law Office of Steven G. Roeder
5560 Chelsea Avenue
La Jolla, California 92037
Telephone: (858) 456-1951